POSSIBLE BREEDING BY THE ROSEMARY BEETLE, *CHRYSOLINA AMERICANA* L. IN BRITAIN

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During May and June 1994 specimens of *Chrysolina americana* L. (Coleoptera: Chrysomelidae) were found at the RHS Garden, Wisley, Surrey. Despite its specific name, this leaf beetle is normally found mainly in the Mediterranean region of Europe, north Africa and the Middle East. Its principal food plant is rosemary, *Rosmarinus officinalis* L., but it will also feed on lavender, *Lavandula* spp. Adult beetles emerge in the spring and feed on foliage at the shoot tips. During mid-summer they enter a period of aestivation, becoming active again and laying eggs in late summer. The brown eggs are deposited singly or in small groups on the underside of leaves. The larvae, which are grey in colour, are present during the autumn. They feed on the foliage, reducing the leaves to the central vein, and may continue feeding into the winter. When fully fed they go down into the soil to pupate (Balachowsky, 1963).

Chrysolina americana has been recorded once before in Britain. On 1.xii.63, six adults were found in a house at Disley, Cheshire (Johnson, 1963). The origin of these beetles is uncertain. Lavender was growing in the garden of the house just outside the room where they were found, although a search for further specimens on the plant and in the soil beneath it was unsuccessful. During August 1963 the occupants of the house had gone on holiday to Portugal and had brought back four pine cones which had been placed in a cupboard in the room where the beetles were subsequently seen. It is possible that these cones contained aestivating adults which later emerged in December. However the cones were removed from a large conifer and cork oak forest and the collectors could not recollect seeing any rosemary or lavender in the area. *Chrysolina americana* is superficially similar to the very scarce British beetle *C. cerealis* (L.); Johnson indicates the distinguishing features in his paper.

The first beetle to be found at Wisley Garden was discovered by a student gardener, Sarah Walton, on 12.v.94. The students are required to make a collection of 25 pests during their year at Wisley and so are on the look-out for suitable insects. It was spotted on a pot-grown plant of *Rosmarinus officinalis* in a nursery area outside a glasshouse in the propagation department. There were 11 similar plants together in the nursery bed and they were carefully examined in the following weeks. Two other adults were found singly on 20.v. and 1.vi.94. All were found at the shoot tips where they were causing a small amount of feeding damage. The three beetles were kept in a container on a rosemary plant. They became dormant in mid-summer and settled in close proximity to each other on the stems. Despite their bright iridescent colours and 6–7 mm length they nestled in the leaf axils and could be overlooked without careful searching. In late summer the beetles began moving around but they died within a period of 5 days in early September without laying any eggs.

The plants on which the beetles had been found were grown from cuttings taken from a plant at Wisley in October 1992. The rooted cuttings over-wintered in a glasshouse and were stood outside during 1993. The fact that *C. americana* had been found in Britain on only one previous occasion suggests that it is unlikely to be an insect capable of migrating to Britain by its own efforts. The discovery of three adults appearing over a 3-week period on a small group of pot-grown plants is

strongly indicative of adults emerging from overwintering sites, having developed as larvae the previous year. It is not known how the beetle may have arrived at Wisley in the first place. No plants from countries where the rosemary beetle occurs had been received by the propagation department during the period when the beetles were found, or in the preceding months. The Garden is close to the M25 and A3 roads and it is possible that a beetle may have hopped off a passing lorry. More likely perhaps is that the beetle may have arrived amongst plants obtained from elsewhere in Europe for the Garden or for its plant sales centre. During the summer of 1994 plants of rosemary and lavender growing at Wisley Garden were examined for signs of feeding, and beaten to try and dislodge aestivating adults, but none was found. It would appear that if *C. americana* did manage to breed at Wisley it had very limited success.

The three specimens of *C. americana* now reside in the collections of the Natural History Museum, London, the BENHS at Dinton Pastures Country Park, Berks, and the RHS at Wisley Garden.

Acknowledgements

I would like to thank Sharon Shute of the Department of Entomology, Natural History Museum for confirming the identity of the beetle and directing me to references about its biology and previous occurrence in Britain.

References

Balachowsky, A. S. 1963. *Entomologie appliquée a l'agriculture* Tome 1 Coléoptères, second volume. Masson & Co, Paris, pp. 638–639.

Johnson, C. 1963. *Chrysolina americana* L. (Col., Chrysomelidae) in Britain. *Entomologist's Mon. Mag.* **99**: 228–229.

SHORT COMMUNICATIONS

***Rhopalum coarctatum* (Scop.) (Hymenoptera: Sphecidae) nesting in a case of *Taleporia tubulosa* Retz. (Lepidoptera: Psychidae).**—A solitary wasp labelled as having been reared 23.vi.1972 from a psychid moth case taken at Pirbright, Surrey, was amongst aculeates in the collection of the late E. S. Bradford, now being added to the BENHS collections. Eric Bradford was a microlepidopterist. The data label queries whether the unexpected emergence betokened unwanted parasitism. The psychid case was not retained, so it is not possible to exonerate the wasp, which more usually stores its aphid prey in plant stems.—R. W. J. Uffen, 4 Mardley Avenue, Welwyn, Hertfordshire AL6 0UD.

Early hibernation of a queen wasp?—On 27.vii.95, I unearthed a hibernating queen of the social wasp *Dolichovespula media* (Retz.) from beneath a rotten log in the woods of Beckenham Place Park, south-east London (TQ385706; VC 16, West Kent). Although this species is known to finish its season early (M. E. Archer, personal communication), the end of July seems a particularly early date to find a queen ready to "overwinter". Elsewhere in the park, subterranean nests of the "common" wasp, *Vespula vulgaris* (L.) were active well into October 1995.—Richard A. Jones, 13 Bellwood Road, Nunhead, London SE15 3DE.